

A New Decontamination Training Aid

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The Maneuver Support Battle Lab (MSBL), working with the Edgewood Chemical Biological Center (ECBC), has been investigating the concept of an individual decontamination training aid to enhance the nuclear, biological, and chemical (NBC) survivability training of service members. Service members who have reacted to an NBC event are typically in mission-oriented protective posture (MOPP) gear. They are eager to reduce their MOPP status as soon as possible, and the individual skin decontamination kit is a tool that allows them to do it.

The services—Army, Navy, Air Force, and Marine Corps—use the M291 decontamination kit to decontaminate skin through physical removal, absorption, and neutralization of toxic agents. The *Soldier's Manual of Common Tasks* lists a step-by-step procedure for self-decontamination using the kit. This task, 031-503-1013 (Decontaminate Yourself and Individual Equipment Using Chemical Decontamination Kits), is taught in initial-entry training and is included in the annual sustainment training conducted by the unit.

The M291 was fielded without a training aid, so the operational kits are used for training. Recently, various units and training activities have expressed the desire for a kit to offset the need to use operational kits for training. The ECBC began a project to see if an effective training aid could be developed using safe, environmentally friendly materials. The contents of the training aid would have to be approved by the U.S. Food and Drug Administration (FDA), reasonably representative, and less expensive than the operational decontamination kit.

The ECBC developed the XM90 to solve this training-aid problem. This skin decontaminating simulation-



Dragon soldiers conduct simulated decontamination with prototype training kit.

training packet is packaged in blue packets and has “Training Aid” stamped on the packet to prevent it from being confused with the M291. The kit uses FDA-approved talc and charcoal, and service members find it better to train with than the black powder that is in the operational kit.

On 26 August 2002, the last in a series of limited objective experiments was conducted at Fort Leonard Wood, Missouri, on Range 290. The MSBL conducted comparison trials over three days with the soldiers alternating between the M291 and XM90 kits. Their comments included, “The XM90 is not as messy or abrasive as the M291 decon kit.”

The M291 with the charcoal particulate material is essential if you get contaminated and you only have a few minutes to remove the toxic agents before they become life threatening. However, for training purposes—to learn how to don your MOPP gear mask and apply the decon kit contents to your hands, face, and neck—the XM90 can be used at half the cost to the units. Once approved, units will be able to order the training aids through unit supply.